



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1395; Project Identifier MCAI-2023-00720-R; Amendment 39-22485; AD 2023-12-26]

RIN 2120-AA64

Airworthiness Directives; Bell Textron Canada Limited Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2021-24-04, which applied to certain Bell Helicopter Textron Canada Limited (type certificate previously held by Bell Helicopter Textron Canada Limited) Model 505 helicopters. AD 2021-24-04 required revising the existing Rotorcraft Flight Manual (RFM) for your helicopter. Since the FAA issued AD 2021-24-04, Bell Textron Canada Limited revised the RFM to incorporate more restrictive operating limitations. This AD is prompted by the determination that the existing altitude limitations were not valid for certain fuel types and that revising the existing RFM for your helicopter to align with the limitations of the Safran Helicopter Engines, S.A. Model ARRIUS 2R engine is necessary. This AD requires revising the existing RFM for your helicopter, as specified in a Transport Canada AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive any comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1395; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is listed above.

Material Incorporated by Reference:

- For Transport Canada material that is incorporated by reference in this final rule, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario, K1A 0N5, CANADA; phone 888-663-3639; email TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca; Internet tc.canada.ca/en/aviation. You may find the Transport Canada material on the Transport Canada website at tc.canada.ca/en/aviation.
- You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1395.

Other Related Service Information: For Bell service information identified in this final rule, contact Bell Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J 1R4, Canada; phone 1-450-437-2862 or 1-800-363-8023; fax 1-450-433-0272; email productsupport@bellflight.com; or at bellflight.com/support/contact-support. You may

also view this service information at the FAA contact information under *Material Incorporated by Reference* above.

FOR FURTHER INFORMATION CONTACT: Michael Hughlett, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (817) 222-5889; email Michael.Hughlett@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2023-1395; Project Identifier MCAI-2023-00720-R” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Michael Hughlett, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590;

phone (817) 222-5889; email Michael.Hughlett@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2021-24-04, Amendment 39-21825 (86 FR 69998, December 9, 2021) (AD 2021-24-04), for Bell Helicopter Textron Canada Limited (type certificate previously held by Bell Helicopter Textron Canada Limited) Model 505 helicopters having serial number 65011 and subsequent. AD 2021-24-04 was prompted by Transport Canada AD CF-2019-08, dated March 5, 2019 (Transport Canada AD CF-2019-08), issued by Transport Canada, which is the aviation authority for Canada. Transport Canada advised of the need to reduce the pressure altitude limitations for Jet B and JP-4 wide-cut fuels following unsatisfactory performance of the engine at the original higher altitude limitations with those wide-cut fuels. AD 2021-24-04 required revising the Limitations Section of the existing RFM for your helicopter. The FAA issued AD 2021-24-04 to prevent low fuel pressure, engine flame-out, or engine power interruption (a change in any engine performance parameter – including, but not limited to, gas generator speed, power turbine speed, main gas temperature, or output torque – outside its normal limits for the prevailing operating conditions).

Actions Since AD 2021-24-04 was Issued

Since the FAA issued AD 2021-24-04, Transport Canada has issued Transport Canada AD CF-2023-16, dated March 6, 2023 (Transport Canada AD CF-2023-16), to supersede Transport Canada AD CF-2019-08.

Transport Canada AD CF-2023-16 states that Bell Textron Canada Limited determined that the altitude limitations in the existing RFM, as they pertain to certain fuel types, were not valid. Accordingly, Transport Canada AD CF-2023-16 requires updating the RFM to align with the limitations of the ARRIUS 2R engine, which include more stringent fuel operating envelope limitations for starting at certain altitudes, ambient temperatures, and fuel specifications. Transport Canada AD CF-2023-16 states that failure to comply with the correct operating limitations could result in low fuel pressure, engine flame-out, or engine power interruption. You may examine Transport Canada AD

CF-2023-16 in the AD docket at regulations.gov under Docket No. FAA-2023-1395.

The FAA is issuing this AD to require limitations that align with the ARRIUS 2R engine. This unsafe condition, if not addressed, could result in low fuel pressure, engine flame-out, or engine power interruption.

This AD also corrects the Applicability paragraph to identify the current type certificate holder as “Bell Textron Canada Limited” instead of “Bell Helicopter Textron Canada Limited” and removes the type certificate previously held by information.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Transport Canada AD CF-2023-16, which specifies to update the RFM BHT-505-FM-1 to Revision 5, or to later revisions, as approved by Transport Canada.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Other Related Service Information

The FAA also reviewed Figure 1-6. Fuel Operating Envelope (Sheet 1 of 1) of Bell 505 Rotorcraft Flight Manual BHT-505-FM-1, Revision 5, dated October 30, 2019, which specifies corrected fuel operating envelope limitations for various fuels.

FAA’s Determination

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in Transport Canada AD CF-2023-16 described above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of these same type design.

AD Requirements

This AD requires accomplishing the actions specified in Transport Canada AD CF-2023-16, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD.

The owner/operator (pilot) holding at least a private pilot certificate may revise the existing RFM for your helicopter and must enter compliance with this AD into the

aircraft records in accordance with 14 CFR 43.9(a) and 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439. This is an exception to the FAA's standard maintenance regulations.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for "good cause," finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because this model helicopter cannot safely fly at altitudes currently authorized by the existing RFM for your helicopter. The unsafe condition may result in low fuel pressure, engine flame-out, or engine power interruption; and this model helicopter does not have an auxiliary power unit onboard making it difficult to restart during flight. Additionally, these are high usage helicopters, which increases the likelihood of occurrence of exceeding the corrected operating limitations. In light of this, revising the existing RFM for your helicopter must be accomplished within 30 days after the effective date of this AD. Therefore, the compliance time for this required action is shorter than the time necessary for the public to comment and for publication of the final rule.

Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B). In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, Transport Canada AD CF-2023-16 is incorporated by reference in this FAA final rule. This AD, therefore, requires compliance with Transport Canada AD CF-2023-16 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD. Using common terms that are the same as the heading of a particular section in the Transport Canada AD does not mean that operators need to comply only with that section. For example, where the AD requirement refers to "Compliance," compliance with this AD requirement is not limited to the section titled "Corrective Actions" in Transport Canada AD CF-2023-16. Service information referenced in Transport Canada AD CF-2023-16 for compliance will be available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1395 after this final rule is published.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 141 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Revising the existing RFM for your helicopter takes about 0.5 work-hour for an estimated cost of \$43 per helicopter and \$6,063 for the U.S. fleet.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive 2021-24-04, Amendment 39-21825 (86 FR 69998, December 9, 2021); and
- b. Adding the following new airworthiness directive:

2023-12-26 Bell Textron Canada Limited: Amendment 39-22485; Docket No. FAA-2023-1395; Project Identifier MCAI-2023-00720-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2021-24-04, Amendment 39-21825 (86 FR 69998, December 9, 2021).

(c) Applicability

This AD applies to Bell Textron Canada Limited Model 505 helicopters having a serial number 65011 and subsequent, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code: 7300, Engine fuel and control.

(e) Unsafe Condition

This AD was prompted by the determination that the altitude limitations for certain fuel types were not valid. The FAA is issuing this AD to require limitations that align with the Safran Helicopter Engines, S.A. Model ARRIUS 2R engine, which include more stringent fuel operating envelope limitations for starting at certain altitudes, ambient temperatures, and fuel specifications. The unsafe condition, if not addressed, could result in low fuel pressure, engine flame-out, or engine power interruption.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, Transport Canada AD CF-2023-16, dated March 6, 2023 (Transport Canada AD CF-2023-16). The owner/operator (pilot) holding at least a private pilot certificate may revise the existing Rotorcraft Flight Manual for your helicopter and must enter compliance with this AD into the aircraft records in accordance with 14 CFR 43.9(a) and 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Exceptions to Transport Canada AD CF-2023-16

Where Transport Canada AD CF-2023-16 refers to its effective date, this AD requires using the effective date of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact Michael Hughlett, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone (817) 222-5889; email Michael.Hughlett@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Transport Canada AD CF-2023-16, dated March 6, 2023.

(ii) [Reserved]

(3) For Transport Canada AD CF-2023-16, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario, K1A 0N5, CANADA; phone 888-663-3639; email TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca; Internet tc.canada.ca/en/aviation. You may find

the Transport Canada material on the Transport Canada website at tc.canada.ca/en/aviation.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 20, 2023.

Michael Linegang, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-14321 Filed: 7/3/2023 11:15 am; Publication Date: 7/6/2023]